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each signal segment is established such that the duration of time of substantially all the signal segments is less than a limit of 50 ms.

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Cont

5. A method of processing an auscultation signal according to ~~claims 1-4~~ ^{*Claim 1*}, characterized in that the auscultation signal is pre-filtered iteratively by means of a high-pass filter until the duration of time of signal segments is less than the limit.

sub-B4

6. A method of processing an auscultation signal according to claim 5, characterized in that the output signal is post-filtered iteratively with a filter having an transfer function corresponding to the inverse amplitude transfer function of the high-pass filter.

sub-B5

7. A method of processing an auscultation signal according to ~~claims 3-5~~ ^{*Claim 3*}, characterized in that the iterative filtering process is terminated when the auscultation signal has been filtered a specified number of times and that an indicator signal indicating termination of the filtering process is provided.

8. A method of processing an auscultation signal according to ~~claims 1-7~~ ^{*Claim 1*}, characterized in that signal segments having a relatively short duration of time are patched together to form a coherent segment comprising at least three zero-crossings, which coherent segment is repeated at least once.

9. A method of processing an auscultation signal, according to ~~claims 1-8~~ ^{*Claim 1*}, characterized in that the auscultation signal is divided into signal segments in zero crossings.

10. A method of processing an auscultation signal according to ~~claims 1-9~~ ^{*Claim 1*}, characterized in that the auscultation signal is divided into signal segments such that the gradients of neighboring signal segments of the output signal are substantially equal, and wherein the neighboring signal segments are level-compensated.

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16. An apparatus according to claim 15, characterized in that the apparatus comprises means for filtering the auscultation signal iteratively by means of an iterative filtering means until the duration of time of substantially all the signal segments is less than the limit.

17. An apparatus according to claim 16, characterized in that the iterative filtering means is interrupted when the filtered signal does not comprise signal segments having a duration of time which is longer than the limit.

18. An apparatus according to ~~claims 15-17~~, characterized in that the limit is less than 40 ms, preferably 30 ms.

19. An apparatus according to ~~claims 15-19~~, characterized in that the apparatus comprises a high-pass filter for pre-filtering the auscultation signal iteratively until the duration of time of signal segments is less than the limit.

~~20. An apparatus according to claim 19, characterized in that apparatus comprises a filter having an amplitude transfer function corresponding to the inverse amplitude transfer function of the high-pass filter, for post-filtering the auscultation signal.~~

21. An apparatus according to ~~claims 17-20~~^{claim 17}, characterized in that the iterative filtering means is interrupted when the auscultation signal has been filtered a specified number of times and that an indicator signal indicating termination of the filtering process is provided.

22. A method of processing an auscultation signal according to ~~claims 15-21~~ claim 15, characterized in that signal seg-

ments having a relatively short duration of time are patched together to form a coherent segment comprising at least three zero-crossings, which coherent segment is repeated at least once.

a 5 23. An apparatus according to ~~claims 15-22~~ ^{Claim 15}, characterized in that the apparatus comprises means for dividing the auscultation signal into signal segments in zero crossings.

a 10 24. An apparatus according to ~~claims 15-23~~ ^{Claim 15}, characterized in that the apparatus comprises means for dividing the auscultation signal into signal segments such that the gradients of neighboring signal segments of the output signal are substantially equal, and wherein the neighboring signal segments are level-compensated.

a 15 25. An apparatus according to ~~claims 15-24~~ ^{Claim 15}, characterized in that the apparatus comprises means for multiplying or filtering the signal divided segments by a window function such that the transitions between neighbouring signal segments are smoothed.

a 20 26. An apparatus according to ~~claims 15-25~~ ^{Claim 15}, characterized in that the apparatus comprises means for reversing the signal segments in the output signal in time.

a 25 27. An apparatus according to ~~claims 15-26~~ ^{Claim 15}, characterized in that the apparatus comprises means for mirroring the signal segments in the output signal about a time axis.

a 30 28. An apparatus according to ~~claims 15-27~~ ^{Claim 15}, characterized in that the apparatus comprises a high-pass filter for pre-filtering the auscultation signal such that further zero crossings may be obtained.

SUB B9
CONT

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characterized in that

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1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100

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